

## New Technologies

The availability of new technologies that have the potential to enhance the capabilities of poor people and strengthen democratic processes is a development of great significance and benefit to poor country democracies fighting poverty. The technologies that helped launch the green revolution, medical advances in combating smallpox, polio, river blindness and tuberculosis, and the new information communication technologies are all examples of the potential that new technologies hold for poverty reduction. The ongoing research on combating HIV/AIDS and malaria, and the unravelling of the genetic code are further examples of what is feasible. They give rise to the hope that the elimination of deep poverty may after all be within the grasp of humanity in our times.

However, the resource requirements, the lack of human institutional capacity and the requisite regulatory frameworks, and an unhelpful global regime in regard to intellectual property rights means that poor countries are missing out on the knowledge and innovation revolution that the exploitation of new technologies promises.

The digital divide between the poor and the rich of the world – between and within countries – illustrates the potential, as well as the failure, in this regard. As the Commonwealth Expert Group on Information Technology has noted, the new information and communication technologies can help combat poverty and deepen democracy in many ways: through improved access to information and distance learning, better delivery of public services, improved governance and better functioning of markets.<sup>47</sup> By cutting costs for firms (for example through stock control and computer aided design processes) and saving time in communications and record keeping, they can enable productivity gains and higher economic growth. However, despite the falling costs of developing the necessary ICT infrastructure and the growth of ‘connectedness’ in many parts of the world, the gap between the poor and rich countries remains large – and is not closing. The cost of Internet access remains prohibitively high in many poor countries both because of lack of proper infrastructure and low per capita incomes: monthly costs range from 107 per cent of per capita GDP in Uganda to 1.2 per cent in the US! The G8’s DOT Force, the Global Knowledge Partnership, the World Bank, the Commonwealth and many others, including several bilateral private initiatives (for example Hewlett-Packard) are working to bridge the gap. Part of the difficulty is that poverty, which often also means poor human development, limits the scope for action. Bridging the digital divide is thus tied to a general reduction of poverty levels.

As the World Bank recognises, the agreement reached in 1994 on TRIPS is:

... generally more beneficial to industrial countries than to developing countries.

Developing countries are net importers of technology, while, in general, industrial countries are the producers of technology. Industrial countries therefore reap the static benefits of higher prices resulting the market power provided by IPRs at the expense of developing countries'. *World Development Report (2002)*, p. 146

While many recognise the yawning gap that exists between industrial countries and the developing countries in the registration of patents and the costs of the present TRIPS regime, they justify it on the ground that it promotes research and development and the transfer of technology to developing countries. The evidence for this is rather less than certain, as the World Bank and others recognise. The poor see the fruit of life, but cannot reach it!